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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,159	06/24/2003	Robert J. Curran	POU920030019US1	9989

7590 07/14/2005

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EXAMINER

PATEL, HETUL B

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/602,159

Applicant(s)

CURRAN ET AL.

Examiner

Hetul Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>06/24/03, 10/09/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-13 are presented for examination.
2. The IDS filed on 06/24/2003 and 10/09/2003 have been received and carefully considered.

Specification

3. The disclosure is objected to because of the following informalities:

The paragraph [0012] on page 4 should be under the "Summary of the Invention" section instead of "Background of the Invention" section as disclosed in this application.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-6 and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kanfi (USPN: 5,559,991).

As per claim 1, Kanfi teaches a method for performing block level incremental backup operations for a file, especially for a large and/or sparse file, said method comprising the steps of: backing up said file to create a backup copy of said file; processing a write request relevant to at least one block of said file by storing changes in information for said file and by providing an indication that information stored in said at least one block of said file is new data; and backing up said file using at least one select block having said indication that information stored in said at least one block of said file is new data (e.g. see the abstract, Col. 4, lines 49-67 and Figs. 3 and 5).

As per claims 11-13, see arguments with respect to the rejection of claim 1. Claims 11-13 are also rejected based on the same rationale as the rejection of claim 1.

As per claim 2, Kanfi teaches the claimed invention as described above and furthermore, Kanfi teaches that the indication, i.e. the signature of the block/file, is stored in inode data for said file (e.g. see Col. 1, lines 33-40).

As per claim 3, Kanfi teaches the claimed invention as described above and furthermore, Kanfi teaches that the indication is stored in indirect blocks, i.e. the blocks those are changed/modified since the last backup or those blocks whose signatures differ from signatures generated, referenced by inode data for said file (e.g. see Col. 8, lines 22-40).

As per claims 4 and 5, Kanfi teaches the claimed invention as described above and furthermore, Kanfi teaches that the backing up of at least one select blocks is

further determined based on two time stamps, i.e. the time stamp 1 (i.e. 301 in Fig. 3) associated with the older version of the block when it last backed up and time stamp 2 (i.e. 501 in Fig. 5) associated with the current/latest version of the block, associated with said at least one block (e.g. see the abstract, Col. 4, lines 49-67 and Figs. 3 and 5).

As per claim 6, Kanfi teaches a method for performing block level incremental backup operations for a file using two time stamps as described in Col. 4, lines 49-67 and Figs. 3 and 5. The feature of, retrieving incrementally backed up block level data by providing two time stamps to a file system in a read request; and returning information with respect to changes in said block made between times indicated by said two time stamps, is also inherently embedded in the file system taught by Kanfi.

5. Claim 6 is rejected under 35 U.S.C. 102(e) as being anticipated by Sarkar (USPN: 2004/0158730).

As per claim 6, Sarkar teaches a method for retrieving incrementally backed up block level data, especially from large and/or sparse files, said method comprising the steps of: providing two time stamps (the current PiTC and earlier PiTC) to a file system in a read request; and returning information with respect to changes in said block made between times indicated by said two time stamps (e.g. see the abstract).

6. Claims 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Uemura et al. (USPN: 5,720,026) hereinafter, Uemura.

As per claim 7, Uemura teaches a method for backing up sparse files, said method comprising the step of: writing to a backup file in a write request to a file system in which at least one user specified portion of said file is defined to have a specified value and in which the size of said at least one portion is specified by said user (e.g. see the abstract and Col. 11, lines 34-49).

As per claim 8, Uemura teaches the claimed invention as described above and furthermore, Uemura teaches that there are a plurality of said portions, i.e. one or more backup generations specified by the user input (e.g. see Col. 11, lines 34-49).

As per claims 9 and 10, Uemura teaches the claimed invention as described above and furthermore, Uemura teaches about the specified value, i.e. a latest backup generation number included in the block for referencing a generation in which data has been updated in the block (e.g. see the claim 1). Since neither applicant nor specification disclose changing the specified value would change the system functionality or performance, therefore, any specified value including zero or any other predetermined value can be used, by this rationale, claims 9 and 10 are rejected.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hetul Patel whose telephone number is 571-272-4184. The examiner can normally be reached on M-F 8-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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